

**Abstract**

The invention relates to Babesia proteins of a 28kDa protein family and to immunogenic fragments of such proteins, to nucleic acids encoding such proteins or fragments, to cDNA fragments, recombinant DNA molecules, live recombinant carriers, or host cells comprising such nucleic acids, to vaccines, to methods for the preparation of such vaccines, to the use of such proteins or fragments for the prophylactic or therapeutic treatment of an infection or its clinical signs caused by an organism of the family Babesiidae, and to diagnostic tests for detection of nucleic acids, antibodies or antigens of an organism of the family Babesiidae.